June 2, 2020

Secretary Marlene H. Dortch
Federal Communications Commission
Office of the Secretary
445 12th Street, SW
Washington DC 20554

Dear Secretary Dortch:

Thank you for your notice regarding Proposed Rule Making (FNPRM), ET Docket No. 19-138. We appreciate the opportunity to comment. Safety is the Maryland Department of Transportation's (MDOT) number one priority. The MDOT is preparing for the changing transportation landscape – especially in the area of connected and automated vehicles (CAV) – by partnering with federal, State, and local organizations, and the private sector, to ensure the safety of all roadway users as technology moves forward. It is our belief that CAV in Maryland and throughout the country relies on a broader allocation of the spectrum to fulfill lifesaving actions. Over the past several years, MDOT objected to the Federal Communications Commission's (FCC) actions to reduce the amount of spectrum, knowing that insufficient spectrum allocation could not support safety, enhance mobility, enable economic growth, and facilitate emergency situations. The MDOT remains concerned about the lack of understanding of how we manage our transportation system and how potential actions directly inhibits our ability to deploy technologies that could operate without competing with secondary applications, such as unlicensed Wi-Fi.

**The Report and Order impacted Maryland financially.** Technology deployments that were already underway had to shift resources, procure new technology, and delay project implementation due to the FCC's actions. The cost impacts span beyond just MDOT – our local agencies also are shouldering the burden to shift out of the lower 45MHz and convert to Cellular-Vehicle-to-everything (C-V2X) equipment. We hope the FCC will advance reimbursement methods to account for its actions.

**The MDOT remains concerned that there will be interference in the remaining 30MHz.** The U.S. Department of Transportation (USDOT), Ford Motor Company, and others have commented in the past that the action by the FCC will cause harmful interference to the remaining 30MHz portion of the band, potentially rendering it less effective. The transportation industry already lost 45MHz of spectrum and yet must now also hope, instead of knowing for a fact, that the limited amount of spectrum left will not be compromised. The MDOT requests the FCC establish appropriate transmission limits for unlicensed Wi-Fi being operated outdoors that could interfere with the remaining 30MHz.

**The current allocation of 30MHz is insufficient.** Maryland is actively deploying connected vehicle technologies to support a variety of safety and mobility applications across our transportation infrastructure. From in-vehicle pedestrian detection to smarter signals, we are implementing technology today that depends on the reasonable allocation of spectrum for optimal performance. Given the reduced spectrum allocation, several of those applications, some of which are already under way, such as signal phasing for safety and eco-driving, will no longer be viable. Future applications of connected vehicle technology in this spectrum could also have provided valuable real-time notifications of current work zones conditions, queues of vehicles around curves often resulting in rear-end collisions, and sudden severe weather conditions such as flooding and wind, among others. In this, we concur with the Intelligent Transportation Society of America's initial findings that many safety-critical applications may be rendered obsolete with only 30MHz of allocated spectrum.

**A two-year transition period to C-V2X is insufficient.** The proposed two-year transition phase to C-V2X only should not be reduced. Infrastructure owners and operators need time to adjust project plans, budgets, procurement, engineering, and workforce training. The proposal to reduce the two-year transition phase also does not consider that infrastructure owner operators have different funding timelines and that the coming year or two have already been allocated to other needs.

Ultimately, the State of Maryland's desire is to deploy technology that is readily available with enough bandwidth to maintain stable transportation safety communications in the long-term. The MDOT recommends the FCC work with the USDOT and other transportation stakeholders to establish spectrum usage standards to promote large scale deployments of life saving technologies across a variety of new technology solutions that can operate cooperatively. This would allow companies to accelerate product development and compete, promoting national economic vitality, and diversifying our portfolio of resources for resiliency purposes.

We thank the FCC for the opportunity to provide insights on these decisions and look forward to accelerating the deployment of connected vehicle technologies in Maryland. As always, MDOT will continue to work with federal agencies and public, private, and academic partners toward the collaborative development of the future transportation landscape.

Respectfully submitted,

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Secretary

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